



## SEQUENCE LISTING

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Ryu, Eun-Hyun  
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<120> ZINC FINGER DOMAINS AND METHODS OF  
IDENTIFYING SAME

<130> 12279-002001

<140> 09/785,632

<141> 2001-02-16

<160> 182

<170> FastSEQ for Windows Version 4.0

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<211> 10

<212> DNA

<213> HIV-1

<400> 1

gacatcgagc

10

<210> 2

<211> 10

<212> DNA

<213> HIV-1

<400> 2

gcagctgctt

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<210> 3

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<212> DNA

<213> HIV-1

<400> 3

gctggggact

10

<210> 4

<211> 10

<212> DNA

<213> Homo sapiens

<400> 4

agggtggagt

10

<210> 5

<211> 10

<212> DNA

<213> Homo sapiens

<400> 5

gctgagacat

10

<210> 6

<211> 47

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<213> Artificial Sequence

<220>

<223> optimal binding site

<400> 6

ccggcgtggg cggctgctg ggcgtgctg ggcggactgc gtgggag

47

<210> 7

<211> 47

<212> DNA

<213> Artificial Sequence

<220>

<223> optimal binding site

<400> 7

tcgacgcca cgcagtcgc ccacgcacgc ccacgcagcc gccacg

47

<210> 8

<211> 49

<212> DNA

<213> HIV-1

<400> 8

ccggcgagcg ggcggctgag cgggctgag cgggcgatc gagcgggag

49

<210> 9

<211> 49

<212> DNA

<213> HIV-1

<400> 9

tcgacgccc ctcgatccgc ccgctcacgc ccgctcgacc gcccgctc

49

<210> 10

<211> 50

<212> DNA

<213> HIV-1

<400> 10

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50

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<211> 50

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<213> HIV-1

<400> 11  
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 <213> Homo sapiens  
 <400> 14  
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 <400> 15  
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 <210> 17  
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 <400> 17  
 tcgacgcccc tgtcttccgc ccatgtacgc ccatgtctcc gcccatgt 48  
 <210> 18  
 <211> 42  
 <212> DNA  
 <213> Artificial Sequence

&lt;220&gt;

&lt;223&gt; plasmid sequence

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)...(42)

&lt;400&gt; 18

aaa gag ggt ggg tcg acc ttc cgg act ggc cag gaa cgc cca  
 Lys Glu Gly Gly Ser Thr Phe Arg Thr Gly Gln Glu Arg Pro  
 1 5 10

42

&lt;210&gt; 19

&lt;211&gt; 14

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; plasmid sequence

&lt;400&gt; 19

Lys Glu Gly Gly Ser Thr Phe Arg Thr Gly Gln Glu Arg Pro  
 1 5 10

&lt;210&gt; 20

&lt;211&gt; 303

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; plasmid sequence

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (25)...(291)

&lt;400&gt; 20

gggtcgacct tccggactgg ccag gaa cgc cca tat gct tgc cct gtc gag  
 Glu Arg Pro Tyr Ala Cys Pro Val Glu  
 1 5

51

tcc tgc gat cgc cgc ttt tct cgc tcg gat gag ctt acc cgc cat atc  
 Ser Cys Asp Arg Arg Phe Ser Arg Ser Asp Glu Leu Thr Arg His Ile  
 10 15 20 25

99

cgc atc cac act ggc cag aag ccc ttc cag tgt cga atc tgc atg cgt  
 Arg Ile His Thr Gly Gln Lys Pro Phe Gln Cys Arg Ile Cys Met Arg  
 30 35 40

147

aac ttc agt cgt agt gac cac ctt acc acc cac atc cgg acc cac acc  
 Asn Phe Ser Arg Ser Asp His Leu Thr Thr His Ile Arg Thr His Thr  
 45 50 55

195

ggc gag aag cct ttt gcc tgt gac att tgt ggg agg aag ttt gcc agg  
 Gly Glu Lys Pro Phe Ala Cys Asp Ile Cys Gly Arg Lys Phe Ala Arg  
 60 65 70

243

agt gat gaa cgc aag agg cat acc aaa atc cat tta aga cag aag gat 291  
 Ser Asp Glu Arg Lys Arg His Thr Lys Ile His Leu Arg Gln Lys Asp  
       75                      80                      85

ccgcgggaat cc 303

<210> 21  
 <211> 89  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> plasmid sequence

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 Arg Ser Asp Glu Leu Thr Arg His Ile Arg Ile His Thr Gly Gln Lys  
                       20                      25                      30  
 Pro Phe Gln Cys Arg Ile Cys Met Arg Asn Phe Ser Arg Ser Asp His  
                       35                      40                      45  
 Leu Thr Thr His Ile Arg Thr His Thr Gly Glu Lys Pro Phe Ala Cys  
   50                      55                      60  
 Asp Ile Cys Gly Arg Lys Phe Ala Arg Ser Asp Glu Arg Lys Arg His  
  65                      70                      75                      80  
 Thr Lys Ile His Leu Arg Gln Lys Asp  
                       85

<210> 22  
 <211> 69  
 <212> DNA  
 <213> Homo sapiens

<400> 22  
 tataaatgta agcaatgtgg gaaagctttt ggatgtccct caaaccttcg aaggcatgga 60  
 aggactcac 69

<210> 23  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 23  
 Tyr Lys Cys Lys Gln Cys Gly Lys Ala Phe Gly Cys Pro Ser Asn Leu  
   1                      5                      10                      15  
 Arg Arg His Gly Arg Thr His  
                       20

<210> 24  
 <211> 69  
 <212> DNA  
 <213> Homo sapiens

<400> 24  
 tataagtgta aggagtgtgg gaaagccttc aaccacagct ccaacttcaa taaacaccac 60

agaatccac

69

&lt;210&gt; 25

&lt;211&gt; 23

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 25

Tyr Lys Cys Lys Glu Cys Gly Lys Ala Phe Asn His Ser Ser Asn Phe

1

5

10

15

Asn Lys His His Arg Ile His

20

&lt;210&gt; 26

&lt;211&gt; 69

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 26

tatgaatgta aggaatgtgg gaaagccttt agtagtggtt caaacttcac tcgacatcag

60

agaattcac

69

&lt;210&gt; 27

&lt;211&gt; 23

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 27

Tyr Glu Cys Lys Glu Cys Gly Lys Ala Phe Ser Ser Gly Ser Asn Phe

1

5

10

15

Thr Arg His Gln Arg Ile His

20

&lt;210&gt; 28

&lt;211&gt; 75

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 28

tatgtatgcg atgtagaggg atgtacgtgg aaatttgccc gctcagatga gctcaacaga

60

cacaagaaaa ggcac

75

&lt;210&gt; 29

&lt;211&gt; 25

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 29

Tyr Val Cys Asp Val Glu Gly Cys Thr Trp Lys Phe Ala Arg Ser Asp

1

5

10

15

Glu Leu Asn Arg His Lys Lys Arg His

20

25

&lt;210&gt; 30

&lt;211&gt; 69

&lt;212&gt; DNA

<213> Homo sapiens

<400> 30

tatgagtgtgta atgaatgcgg gaaagctttt gcccaaaatt caactctcag agtacaccag 60  
agaattcac 69

<210> 31

<211> 23

<212> PRT

<213> Homo sapiens

<400> 31

Tyr Glu Cys Asn Glu Cys Gly Lys Ala Phe Ala Gln Asn Ser Thr Leu  
1 5 10 15  
Arg Val His Gln Arg Ile His  
20

<210> 32

<211> 69

<212> DNA

<213> Homo sapiens

<400> 32

tatgagtgtgta attactgtgg aaaaaccttt agtgtgagct caacccttat tagacatcag 60  
agaatccac 69

<210> 33

<211> 23

<212> PRT

<213> Homo sapiens

<400> 33

Tyr Glu Cys Asn Tyr Cys Gly Lys Thr Phe Ser Val Ser Ser Thr Leu  
1 5 10 15  
Ile Arg His Gln Arg Ile His  
20

<210> 34

<211> 69

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (1)...(69)

<400> 34

tat cag tgc aac att tgc gga aaa tgt ttc tcc tgc aac tcc aac ctc 48  
Tyr Gln Cys Asn Ile Cys Gly Lys Cys Phe Ser Cys Asn Ser Asn Leu  
1 5 10 15

cac agg cac cag aga acg cac 69  
His Arg His Gln Arg Thr His  
20

<210> 35

<211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 35  
 Tyr Gln Cys Asn Ile Cys Gly Lys Cys Phe Ser Cys Asn Ser Asn Leu  
 1 5 10 15  
 His Arg His Gln Arg Thr His  
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<210> 36  
 <211> 69  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)...(69)

<400> 36  
 tat gca tgt cat cta tgt gga aaa gcc ttc act cag agt tct cac ctt 48  
 Tyr Ala Cys His Leu Cys Gly Lys Ala Phe Thr Gln Ser Ser His Leu  
 1 5 10 15  
 aga aga cat gag aaa act cac 69  
 Arg Arg His Glu Lys Thr His  
 20

<210> 37  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 37  
 Tyr Ala Cys His Leu Cys Gly Lys Ala Phe Thr Gln Ser Ser His Leu  
 1 5 10 15  
 Arg Arg His Glu Lys Thr His  
 20

<210> 38  
 <211> 69  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)...(69)

<400> 38  
 tat aaa tgc ggc cag tgt ggg aag ttc tac tcg cag gtc tcc cac ctc 48  
 Tyr Lys Cys Gly Gln Cys Gly Lys Phe Tyr Ser Gln Val Ser His Leu  
 1 5 10 15  
 acc cgc cac cag aaa atc cac 69  
 Thr Arg His Gln Lys Ile His  
 20



<210> 39  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 39  
 Tyr Lys Cys Gly Gln Cys Gly Lys Phe Tyr Ser Gln Val Ser His Leu  
 1 5 10 15  
 Thr Arg His Gln Lys Ile His  
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<210> 40  
 <211> 69  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)...(69)

<400> 40  
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 Tyr Ala Cys His Leu Cys Gly Lys Ala Phe Thr Gln Cys Ser His Leu  
 1 5 10 15

aga aga cat gag aaa act cac 69  
 Arg Arg His Glu Lys Thr His  
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<210> 41  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 41  
 Tyr Ala Cys His Leu Cys Gly Lys Ala Phe Thr Gln Cys Ser His Leu  
 1 5 10 15  
 Arg Arg His Glu Lys Thr His  
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<210> 42  
 <211> 69  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)...(69)

<400> 42  
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 Tyr Ala Cys His Leu Cys Ala Lys Ala Phe Ile Gln Cys Ser His Leu  
 1 5 10 15

aga aga cat gag aaa act cac 69

Arg Arg His Glu Lys Thr His  
20

<210> 43  
<211> 23  
<212> PRT  
<213> Homo sapiens

<400> 43  
Tyr Ala Cys His Leu Cys Ala Lys Ala Phe Ile Gln Cys Ser His Leu  
1 5 10 15  
Arg Arg His Glu Lys Thr His  
20

<210> 44  
<211> 69  
<212> DNA  
<213> Homo sapiens

<220>  
<221> CDS  
<222> (1)...(69)

<400> 44  
tat gtt tgc agg gaa tgt ggg cgt ggc ttt cgc cag cat tca cac ctg 48  
Tyr Val Cys Arg Glu Cys Gly Arg Gly Phe Arg Gln His Ser His Leu  
1 5 10 15

gtc aga cac aag agg aca cat 69  
Val Arg His Lys Arg Thr His  
20

<210> 45  
<211> 23  
<212> PRT  
<213> Homo sapiens

<400> 45  
Tyr Val Cys Arg Glu Cys Gly Arg Gly Phe Arg Gln His Ser His Leu  
1 5 10 15  
Val Arg His Lys Arg Thr His  
20

<210> 46  
<211> 69  
<212> DNA  
<213> Homo sapiens

<220>  
<221> CDS  
<222> (1)...(69)

<400> 46  
ttt gag tgt aaa gat tgc ggg aaa gct ttc att cag aag tca aac ctc 48  
Phe Glu Cys Lys Asp Cys Gly Lys Ala Phe Ile Gln Lys Ser Asn Leu  
1 5 10 15

atc aga cac cag aga act cac  
 Ile Arg His Gln Arg Thr His  
 20

69

<210> 47  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 47  
 Phe Glu Cys Lys Asp Cys Gly Lys Ala Phe Ile Gln Lys Ser Asn Leu  
 1 5 10 15  
 Ile Arg His Gln Arg Thr His  
 20

<210> 48  
 <211> 69  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)...(69)

<400> 48  
 tat gtc tgc agg gag tgt agg cga ggt ttt agc cag aag tca aat ctc  
 Tyr Val Cys Arg Glu Cys Arg Arg Gly Phe Ser Gln Lys Ser Asn Leu  
 1 5 10 15

48

atc aga cac cag agg acg cac  
 Ile Arg His Gln Arg Thr His  
 20

69

<210> 49  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 49  
 Tyr Val Cys Arg Glu Cys Arg Arg Gly Phe Ser Gln Lys Ser Asn Leu  
 1 5 10 15  
 Ile Arg His Gln Arg Thr His  
 20

<210> 50  
 <211> 69  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)...(69)

<400> 50  
 tat gaa tgt aac aca tgc agg aaa acc ttc tct caa aag tca aat ctc

48

Tyr Glu Cys Asn Thr Cys Arg Lys Thr Phe Ser Gln Lys Ser Asn Leu  
 1 5 10 15

att gta cat cag aga aca cac  
 Ile Val His Gln Arg Thr His  
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69

<210> 51  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 51  
 Tyr Glu Cys Asn Thr Cys Arg Lys Thr Phe Ser Gln Lys Ser Asn Leu  
 1 5 10 15  
 Ile Val His Gln Arg Thr His  
 20

<210> 52  
 <211> 69  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)...(69)

<400> 52  
 tat gtt tgc tca aaa tgt ggg aaa gcc ttc act cag agt tca aat ctg  
 Tyr Val Cys Ser Lys Cys Gly Lys Ala Phe Thr Gln Ser Ser Asn Leu  
 1 5 10 15

48

act gta cat caa aaa atc cac  
 Thr Val His Gln Lys Ile His  
 20

69

<210> 53  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 53  
 Tyr Val Cys Ser Lys Cys Gly Lys Ala Phe Thr Gln Ser Ser Asn Leu  
 1 5 10 15  
 Thr Val His Gln Lys Ile His  
 20

<210> 54  
 <211> 69  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)...(69)

<400> 54  
 tac aaa tgt gac gaa tgt gga aaa aac ttt acc cag tcc tcc aac ctt 48  
 Tyr Lys Cys Asp Glu Cys Gly Lys Asn Phe Thr Gln Ser Ser Asn Leu  
 1 5 10 15

att gta cat aag aga att cat 69  
 Ile Val His Lys Arg Ile His  
 20

<210> 55  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 55  
 Tyr Lys Cys Asp Glu Cys Gly Lys Asn Phe Thr Gln Ser Ser Asn Leu  
 1 5 10 15  
 Ile Val His Lys Arg Ile His  
 20

<210> 56  
 <211> 69  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)...(69)

<400> 56  
 tat gaa tgt gat gtg tgt gga aaa acc ttc acg caa aag tca aac ctt 48  
 Tyr Glu Cys Asp Val Cys Gly Lys Thr Phe Thr Gln Lys Ser Asn Leu  
 1 5 10 15

ggt gta cat cag aga act cat 69  
 Gly Val His Gln Arg Thr His  
 20

<210> 57  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 57  
 Tyr Glu Cys Asp Val Cys Gly Lys Thr Phe Thr Gln Lys Ser Asn Leu  
 1 5 10 15  
 Gly Val His Gln Arg Thr His  
 20

<210> 58  
 <211> 69  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS

<222> (1)...(69)

<400> 58

tat	aag	tgc	cct	gat	tgt	ggg	aag	agt	ttt	agt	cag	agt	tcc	agc	ctc	48
Tyr	Lys	Cys	Pro	Asp	Cys	Gly	Lys	Ser	Phe	Ser	Gln	Ser	Ser	Ser	Leu	
1				5				10					15			

att	cgc	cac	cag	cgg	aca	cac	69
Ile	Arg	His	Gln	Arg	Thr	His	
			20				

<210> 59

<211> 23

<212> PRT

<213> Homo sapiens

<400> 59

Tyr	Lys	Cys	Pro	Asp	Cys	Gly	Lys	Ser	Phe	Ser	Gln	Ser	Ser	Ser	Leu
1				5				10					15		
Ile	Arg	His		Gln	Arg	Thr	His								
				20											

<210> 60

<211> 69

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (1)...(69)

<400> 60

tat	gag	tgt	cag	gac	tgt	ggg	agg	gcc	ttc	aac	cag	aac	tcc	tcc	ctg	48
Tyr	Glu	Cys	Gln	Asp	Cys	Gly	Arg	Ala	Phe	Asn	Gln	Asn	Ser	Ser	Leu	
1				5				10					15			

ggg	cgg	cac	aag	agg	aca	cac	69
Gly	Arg	His	Lys	Arg	Thr	His	
			20				

<210> 61

<211> 23

<212> PRT

<213> Homo sapiens

<400> 61

Tyr	Glu	Cys	Gln	Asp	Cys	Gly	Arg	Ala	Phe	Asn	Gln	Asn	Ser	Ser	Leu
1				5				10					15		
Gly	Arg	His		Lys	Arg	Thr	His								
				20											

<210> 62

<211> 69

<212> DNA

<213> Homo sapiens

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)...(69)

&lt;400&gt; 62

tac aaa tgt gaa gaa tgt ggc aaa gct ttt aac cag tcc tca acc ctt 48

Tyr Lys Cys Glu Glu Cys Gly Lys Ala Phe Asn Gln Ser Ser Thr Leu

1

5

10

15

act aga cat aag ata gtt cat

69

Thr Arg His Lys Ile Val His

20

&lt;210&gt; 63

&lt;211&gt; 23

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 63

Tyr Lys Cys Glu Glu Cys Gly Lys Ala Phe Asn Gln Ser Ser Thr Leu

1

5

10

15

Thr Arg His Lys Ile Val His

20

&lt;210&gt; 64

&lt;211&gt; 69

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)...(69)

&lt;400&gt; 64

tat aag tgc atg gag tgt ggg aag gct ttt aac cgc agg tca cac ctc 48

Tyr Lys Cys Met Glu Cys Gly Lys Ala Phe Asn Arg Arg Ser His Leu

1

5

10

15

aca cgg cac cag cgg att cac

69

Thr Arg His Gln Arg Ile His

20

&lt;210&gt; 65

&lt;211&gt; 23

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 65

Tyr Lys Cys Met Glu Cys Gly Lys Ala Phe Asn Arg Arg Ser His Leu

1

5

10

15

Thr Arg His Gln Arg Ile His

20

&lt;210&gt; 66

&lt;211&gt; 69

&lt;212&gt; DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (1)...(69)

<400> 66

tat	aca	tgt	aaa	cag	tgt	ggg	aaa	gcc	ttc	agt	gtt	tcc	agt	tcc	ctt	48
Tyr	Thr	Cys	Lys	Gln	Cys	Gly	Lys	Ala	Phe	Ser	Val	Ser	Ser	Ser	Leu	
1				5					10					15		

cga	aga	cat	gaa	acc	act	cac	69
Arg	Arg	His	Glu	Thr	Thr	His	
			20				

<210> 67

<211> 23

<212> PRT

<213> Homo sapiens

<400> 67

Tyr	Thr	Cys	Lys	Gln	Cys	Gly	Lys	Ala	Phe	Ser	Val	Ser	Ser	Ser	Leu
1				5					10					15	
Arg	Arg	His	Glu	Thr	Thr	His									
			20												

<210> 68

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> purified polypeptide

<220>

<221> VARIANT

<222> 1, 13

<223> Xaa = Phe or Tyr

<220>

<221> VARIANT

<222> 2, 4-8, 10-12, 14, 16, 20, 23-27

<223> Xaa = any amino acid

<220>

<221> VARIANT

<222> 19

<223> Xaa = hydrophobic residue

<400> 68

Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Cys	Xaa
1				5					10					15	
Ser	Asn	Xaa	Xaa	Arg	His	Xaa	Xaa	Xaa	Xaa	Xaa	His				
			20					25							

<210> 69



<211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> purified polypeptide

<220>  
 <221> VARIANT  
 <222> 1, 13  
 <223> Xaa = Phe or Tyr

<220>  
 <221> VARIANT  
 <222> 2, 4-8, 10-12, 14, 16, 20, 23-27  
 <223> Xaa = any amino acid

<220>  
 <221> VARIANT  
 <222> 19  
 <223> Xaa = hydrophobic residue

<400> 69  
 Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa His Xaa  
 1 5 10 15  
 Ser Asn Xaa Xaa Lys His Xaa Xaa Xaa Xaa Xaa His  
 20 25

<210> 70  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> purified polypeptide

<220>  
 <221> VARIANT  
 <222> 1, 13  
 <223> Xaa = Phe or Tyr

<220>  
 <221> VARIANT  
 <222> 2, 4-8, 10-12, 14, 16, 20, 23-27  
 <223> Xaa = any amino acid

<220>  
 <221> VARIANT  
 <222> 19  
 <223> Xaa = hydrophobic residue

<400> 70  
 Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Ser Xaa  
 1 5 10 15  
 Ser Asn Xaa Xaa Arg His Xaa Xaa Xaa Xaa Xaa His  
 20 25

<210> 71  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> purified polypeptide

<220>  
 <221> VARIANT  
 <222> 1, 13  
 <223> Xaa = Phe or Tyr

<220>  
 <221> VARIANT  
 <222> 2, 4-8, 10-12, 14, 16, 20, 23-27  
 <223> Xaa = any amino acid

<220>  
 <221> VARIANT  
 <222> 19  
 <223> Xaa = hydrophobic residue

<400> 71  
 Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Gln Xaa  
 1 5 10 15  
 Ser Thr Xaa Xaa Val His Xaa Xaa Xaa Xaa Xaa His  
 20 25

<210> 72  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> purified polypeptide

<220>  
 <221> VARIANT  
 <222> 1, 13  
 <223> Xaa = Phe or Tyr

<220>  
 <221> VARIANT  
 <222> 2, 4-8, 10-12, 14, 16, 20, 23-27  
 <223> Xaa = any amino acid

<220>  
 <221> VARIANT  
 <222> 18  
 <223> Xaa = Ser or Thr

<220>  
 <221> VARIANT  
 <222> 19

<223> Xaa = hydrophobic residue

<400> 72

Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Val	Xaa
1			5					10						15	
Ser	Xaa	Xaa	Xaa	Arg	His	Xaa	Xaa	Xaa	Xaa	Xaa	His				
			20					25							

<210> 73

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> purified polypeptide

<220>

<221> VARIANT

<222> 1, 13

<223> Xaa = Phe or Tyr

<220>

<221> VARIANT

<222> 2, 4-8, 10-12, 14, 16, 20, 23-27

<223> Xaa = any amino acid

<220>

<221> VARIANT

<222> 19

<223> Xaa = hydrophobic residue

<400> 73

Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Gln	Xaa
1			5					10						15	
Ser	His	Xaa	Xaa	Arg	His	Xaa	Xaa	Xaa	Xaa	Xaa	His				
			20					25							

<210> 74

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> purified polypeptide

<220>

<221> VARIANT

<222> 1, 13

<223> Xaa = Phe or Tyr

<220>

<221> VARIANT

<222> 2, 4-8, 10-12, 14, 16, 20, 23-27

<223> Xaa = any amino acid

<220>

<221> VARIANT

<222> 19

<223> Xaa = hydrophobic residue

<400> 74

Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Gln	Xaa
1			5					10						15	
Ser	Asn	Xaa	Xaa	Val	His	Xaa	Xaa	Xaa	Xaa	Xaa	His				
			20					25							

<210> 75

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> purified polypeptide

<220>

<221> VARIANT

<222> 1, 13

<223> Xaa = Phe or Tyr

<220>

<221> VARIANT

<222> 2, 4-8, 10-12, 14, 16, 20, 23-27

<223> Xaa = any amino acid

<220>

<221> VARIANT

<222> 18

<223> Xaa = Ser or Thr

<220>

<221> VARIANT

<222> 19

<223> Xaa = hydrophobic residue

<400> 75

Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Gln	Xaa
1			5					10						15	
Ser	Xaa	Xaa	Xaa	Arg	His	Xaa	Xaa	Xaa	Xaa	Xaa	His				
			20					25							

<210> 76

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> coordinating residue

<220>

<221> VARIANT

<222> 1, 13

<223> Xaa = Phe or Tyr

<220>

<221> VARIANT

<222> 2, 4-8, 10-12, 14-18, 20-21, 23-27

<223> Xaa = any amino acid

<220>

<221> VARIANT

<222> 19

<223> Xaa = hydrophobic residue

<400> 76

Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa

1

5

10

15

Xaa Xaa Xaa Xaa Xaa His Xaa Xaa Xaa Xaa Xaa His

20

25

<210> 77

<211> 24

<212> PRT

<213> Artificial Sequence

<220>

<223> polypeptide motif

<220>

<221> VARIANT

<222> 1

<223> Xaa = Leu, Ile, Val, Met, Phe, Tyr, or Gly

<220>

<221> VARIANT

<222> 2

<223> Xaa = Ala, Ser, Leu, Val, or Arg

<220>

<221> VARIANT

<222> 3-4, 6, 8-11, 17, 19-23

<223> Xaa = any amino acid

<220>

<221> VARIANT

<222> 5

<223> Xaa = Leu, Ile, Val, Met, Ser, Thr, Ala, Cys, or  
Asn

<220>

<221> VARIANT

<222> 7

<223> Xaa = Leu, Ile, Val, or Met

<220>

<221> VARIANT

<222> 12

<223> Xaa = Leu, Ile, or Val

<220>  
 <221> VARIANT  
 <222> 13  
 <223> Xaa = Arg, Lys, Asn, Gln, Glu, Ser, Thr, Ala, Ile,  
 or Tyr

<220>  
 <221> VARIANT  
 <222> 14  
 <223> Xaa = Leu, Ile, Val, Phe, Ser, Thr, Asn, Lys, or  
 His

<220>  
 <221> VARIANT  
 <222> 16  
 <223> Xaa = Phe, Tyr, Val, or Cys

<220>  
 <221> VARIANT  
 <222> 18  
 <223> Xaa = Asn, Asp, Gln, Thr, Ala, or His

<220>  
 <221> VARIANT  
 <222> 24  
 <223> Xaa = Arg, Lys, Asn, Ala, Ile, Met, or Trp

<400> 77  
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Trp Xaa  
 1 5 10 15  
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
 20

<210> 78  
 <211> 6  
 <212> PRT  
 <213> Eukaryote

<220>  
 <221> VARIANT  
 <222> 3  
 <223> Xaa = Glu or Gln

<220>  
 <221> VARIANT  
 <222> 4  
 <223> Xaa = Lys or Arg

<220>  
 <221> VARIANT  
 <222> 6  
 <223> Xaa = Tyr or Phe

<400> 78  
 Thr Gly Xaa Xaa Pro Xaa  
 1 5

<210> 79  
 <211> 29  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> synthetic oligonucleotide  
  
 <400> 79  
 tgcctgcagc atttgtggga ggaagtttg 29  
  
 <210> 80  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> synthetic oligonucleotide  
  
 <400> 80  
 atgctgcagg ctttaaggctt ctcgccggtg 30  
  
 <210> 81  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> primer for PCR  
  
 <220>  
 <221> misc\_feature  
 <222> 11, 17, 20  
 <223> n = A, T, G, or C  
  
 <400> 81  
 gcgtccggac ncayacnggn sara 24  
  
 <210> 82  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> primer for PCR  
  
 <220>  
 <221> misc\_feature  
 <222> 10-11, 16  
 <223> n = A, T, G, or C  
  
 <400> 82  
 cggaattcan nbrwanggyy tytc 24  
  
 <210> 83

<211> 7  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> amino acid motif

<220>  
 <221> VARIANT  
 <222> 4  
 <223> Xaa = Glu or Gln

<220>  
 <221> VARIANT  
 <222> 5  
 <223> Xaa = Lys or Arg

<220>  
 <221> VARIANT  
 <222> 3  
 <223> Xaa = Tyr or Phe

<400> 83  
 His Thr Gly Xaa Xaa Pro Xaa  
 1 5

<210> 84  
 <211> 54  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> synthetic oligonucleotide

<400> 84  
 gggcccgagg agaagcctta cgcattgtcca gtcgaatctt gtgatagaag attc

54

<210> 85  
 <211> 75  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> synthetic oligonucleotide

<220>  
 <221> misc\_feature  
 <222> 36, 39, 45, 48, 51, 54  
 <223> n = A, T, G, or C

<400> 85  
 ctccccgcgg ttcgccggtg tggattctga tatgsnbsnb aagsnbsnbs nbsnbtgaga  
 atcttctatc acaag

60

75

<210> 86  
 <211> 23



<212> DNA  
 <213> Artificial Sequence

<220>  
 <223> synthetic oligonucleotide

<400> 86  
 ctagacccgg gaattcgtag acg

23

<210> 87  
 <211> 23  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> synthetic oligonucleotide

<400> 87  
 gatccgtcga cgaattcccg ggt

23

<210> 88  
 <211> 38  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> synthetic oligonucleotide

<220>  
 <221> misc\_feature  
 <222> 6-8, 18-20, 30-32  
 <223> n = A, T, G, or C

<400> 88  
 ccggtnnntg ggcgtacnnn tgggcgtcan nntgggcg

38

<210> 89  
 <211> 38  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> synthetic oligonucleotide

<220>  
 <221> misc\_feature  
 <222> 11-13, 23-25, 35-37  
 <223> n = A, T, G, or C

<400> 89  
 tcgacgccca nnntgacgcc canngtagc cccannna

38

<210> 90  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
<223> synthetic probe for gel shift assay

<400> 90  
ccgggtcgcg cgtgggcggt accg 24

<210> 91  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> synthetic probe for gel shift assay

<400> 91  
tcgacggtac cgcccacgcg cgac 24

<210> 92  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> synthetic probe for gel shift assay

<400> 92  
ccgggtcgcg agcgggcggt accg 24

<210> 93  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> synthetic probe for gel shift assay

<400> 93  
tcgacggtac cgcccgtcg cgac 24

<210> 94  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> synthetic probe for gel shift assay

<400> 94  
ccgggtcgtg cttgggcggt accg 24

<210> 95  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
 <223> synthetic probe for gel shift assay  
  
 <400> 95  
 tcgacggtac cgcccaagca cgac 24  
  
 <210> 96  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> synthetic probe for gel shift assay  
  
 <400> 96  
 ccgggtcggg actgggcggt accg 24  
  
 <210> 97  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> synthetic probe for gel shift assay  
  
 <400> 97  
 tcgacggtac cgcccagtcg cgac 24  
  
 <210> 98  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> synthetic probe for gel shift assay  
  
 <400> 98  
 ccgggtcggg agtgggcggt accg 24  
  
 <210> 99  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> synthetic probe for gel shift assay  
  
 <400> 99  
 tcgacggtac cgcccactcc cgac 24  
  
 <210> 100  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>

<223> synthetic probe for gel shift assay

<400> 100

ccgggtcgga catgggcggt accg

24

<210> 101

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic probe for gel shift assay

<400> 101

tcgacggtac cgcccatgtc cgac

24

<210> 102

<211> 69

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (1)...(69)

<400> 102

tat aag tgt aag gaa tgt ggg cag gcc ttt aga cag cgt gca cat ctt  
Tyr Lys Cys Lys Glu Cys Gly Gln Ala Phe Arg Gln Arg Ala His Leu  
1 5 10 15

48

att cga cat cac aaa ctt cac  
Ile Arg His His Lys Leu His  
20

69

<210> 103

<211> 23

<212> PRT

<213> Homo sapiens

<400> 103

Tyr Lys Cys Lys Glu Cys Gly Gln Ala Phe Arg Gln Arg Ala His Leu  
1 5 10 15  
Ile Arg His His Lys Leu His  
20

<210> 104

<211> 69

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (1)...(69)

<400> 104

tat aag tgt cat caa tgt ggg aaa gcc ttt att caa tcc ttt aac ctt

48

Tyr Lys Cys His Gln Cys Gly Lys Ala Phe Ile Gln Ser Phe Asn Leu  
 1 5 10 15

cga aga cat gag aga act cac  
 Arg Arg His Glu Arg Thr His  
 20

69

<210> 105  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 105  
 Tyr Lys Cys His Gln Cys Gly Lys Ala Phe Ile Gln Ser Phe Asn Leu  
 1 5 10 15  
 Arg Arg His Glu Arg Thr His  
 20

<210> 106  
 <211> 69  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)...(69)

<400> 106  
 ttc cag tgt aat cag tgt ggg gca tct ttt act cag aaa ggt aac ctc  
 Phe Gln Cys Asn Gln Cys Gly Ala Ser Phe Thr Gln Lys Gly Asn Leu  
 1 5 10 15

48

ctc cgc cac att aaa ctg cac  
 Leu Arg His Ile Lys Leu His  
 20

69

<210> 107  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 107  
 Phe Gln Cys Asn Gln Cys Gly Ala Ser Phe Thr Gln Lys Gly Asn Leu  
 1 5 10 15  
 Leu Arg His Ile Lys Leu His  
 20

<210> 108  
 <211> 72  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> primer for PCR

<220>  
 <221> misc\_feature  
 <222> 22-72  
 <223> n =A, T, G, or C

<400> 108  
 acccacactg gccagaaacc cnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 60  
 nnnnnnnnnnn nn 72

<210> 109  
 <211> 66  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> primer for PCR

<220>  
 <221> misc\_feature  
 <222> 22-66  
 <223> n = A, T, G, or C

<400> 109  
 gatctgaatt cattcaccgg tnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 60  
 nnnnnnn 66

<210> 110  
 <211> 69  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)...(69)

<400> 110  
 tac aaa tgt gaa gaa tgt ggc aaa gcc ttt agg cag tcc tca cac ctt 48  
 Tyr Lys Cys Glu Glu Cys Gly Lys Ala Phe Arg Gln Ser Ser His Leu  
 1 5 10 15

act aca cat aag ata att cat 69  
 Thr Thr His Lys Ile Ile His  
 20

<210> 111  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 111  
 Tyr Lys Cys Glu Glu Cys Gly Lys Ala Phe Arg Gln Ser Ser His Leu  
 1 5 10 15  
 Thr Thr His Lys Ile Ile His  
 20

<210> 112

<211> 69  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)...(69)

<400> 112  
 tat gag tgt gat cac tgt gga aaa tcc ttt agc cag agc tct cat ctg 48  
 Tyr Glu Cys Asp His Cys Gly Lys Ser Phe Ser Gln Ser Ser His Leu  
 1 5 10 15

aat gtg cac aaa aga act cac 69  
 Asn Val His Lys Arg Thr His  
 20

<210> 113  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 113  
 Tyr Glu Cys Asp His Cys Gly Lys Ser Phe Ser Gln Ser Ser His Leu  
 1 5 10 15  
 Asn Val His Lys Arg Thr His  
 20

<210> 114  
 <211> 69  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)...(69)

<400> 114  
 tac atg tgc agt gag tgt ggg cga ggc ttc agc cag aag tca aac ctc 48  
 Tyr Met Cys Ser Glu Cys Gly Arg Gly Phe Ser Gln Lys Ser Asn Leu  
 1 5 10 15

atc ata cac cag agg aca cac 69  
 Ile Ile His Gln Arg Thr His  
 20

<210> 115  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 115  
 Tyr Met Cys Ser Glu Cys Gly Arg Gly Phe Ser Gln Lys Ser Asn Leu  
 1 5 10 15  
 Ile Ile His Gln Arg Thr His  
 20

<210> 116  
 <211> 69  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)...(69)

<400> 116  
 tat gaa tgt gaa aaa tgt ggc aaa gct ttt aac cag tcc tca aat ctt 48  
 Tyr Glu Cys Glu Lys Cys Gly Lys Ala Phe Asn Gln Ser Ser Asn Leu  
 1 5 10 15  
 act aga cat aag aaa agt cat 69  
 Thr Arg His Lys Lys Ser His  
 20

<210> 117  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 117  
 Tyr Glu Cys Glu Lys Cys Gly Lys Ala Phe Asn Gln Ser Ser Asn Leu  
 1 5 10 15  
 Thr Arg His Lys Lys Ser His  
 20

<210> 118  
 <211> 69  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)...(69)

<400> 118  
 tat gag tgc aat gaa tgt ggg aag ttt ttt agc cag agc tcc agc ctc 48  
 Tyr Glu Cys Asn Glu Cys Gly Lys Phe Phe Ser Gln Ser Ser Ser Leu  
 1 5 10 15  
 att aga cat agg aga agt cac 69  
 Ile Arg His Arg Arg Ser His  
 20

<210> 119  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 119  
 Tyr Glu Cys Asn Glu Cys Gly Lys Phe Phe Ser Gln Ser Ser Ser Leu  
 1 5 10 15



Ile Arg His Arg Arg Ser His  
20

<210> 120  
<211> 69  
<212> DNA  
<213> Homo sapiens

<220>  
<221> CDS  
<222> (1)...(69)

<400> 120  
tat gag tgt cac gat tgc gga aag tcc ttt agg cag agc acc cac ctc 48  
Tyr Glu Cys His Asp Cys Gly Lys Ser Phe Arg Gln Ser Thr His Leu  
1 5 10 15

act cag cac cgg agg atc cac 69  
Thr Gln His Arg Arg Ile His  
20

<210> 121  
<211> 23  
<212> PRT  
<213> Homo sapiens

<400> 121  
Tyr Glu Cys His Asp Cys Gly Lys Ser Phe Arg Gln Ser Thr His Leu  
1 5 10 15  
Thr Gln His Arg Arg Ile His  
20

<210> 122  
<211> 69  
<212> DNA  
<213> Homo sapiens

<220>  
<221> CDS  
<222> (1)...(69)

<400> 122  
tat gag tgt cac gat tgc gga aag tcc ttt agg cag agc acc cac ctc 48  
Tyr Glu Cys His Asp Cys Gly Lys Ser Phe Arg Gln Ser Thr His Leu  
1 5 10 15

act cgg cac cgg agg atc cac 69  
Thr Arg His Arg Arg Ile His  
20

<210> 123  
<211> 23  
<212> PRT  
<213> Homo sapiens

<400> 123

Tyr Glu Cys His Asp Cys Gly Lys Ser Phe Arg Gln Ser Thr His Leu  
 1 5 10 15  
 Thr Arg His Arg Arg Ile His  
 20

<210> 124  
 <211> 69  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)...(69)

<400> 124  
 cac aag tgc ctt gaa tgt ggg aaa tgc ttc agt cag aac acc cat ctg 48  
 His Lys Cys Leu Glu Cys Gly Lys Cys Phe Ser Gln Asn Thr His Leu  
 1 5 10 15

act cgc cac caa cgc acc cac 69  
 Thr Arg His Gln Arg Thr His  
 20

<210> 125  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 125  
 His Lys Cys Leu Glu Cys Gly Lys Cys Phe Ser Gln Asn Thr His Leu  
 1 5 10 15  
 Thr Arg His Gln Arg Thr His  
 20

<210> 126  
 <211> 75  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)...(75)

<400> 126  
 tac cac tgt gac tgg gac ggc tgt gga tgg aaa ttc gcc cgc tca gat 48  
 Tyr His Cys Asp Trp Asp Gly Cys Gly Trp Lys Phe Ala Arg Ser Asp  
 1 5 10 15

gaa ctg acc agg cac tac cgt aaa cac 75  
 Glu Leu Thr Arg His Tyr Arg Lys His  
 20 25

<210> 127  
 <211> 25  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 127

Tyr	His	Cys	Asp	Trp	Asp	Gly	Cys	Gly	Trp	Lys	Phe	Ala	Arg	Ser	Asp
1				5					10					15	
Glu	Leu	Thr	Arg	His	Tyr	Arg	Lys	His							
			20					25							

&lt;210&gt; 128

&lt;211&gt; 75

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)...(75)

&lt;400&gt; 128

tac	aga	tgc	tca	tgg	gaa	ggg	tgt	gag	tgg	cgt	ttt	gca	aga	agt	gat	48
Tyr	Arg	Cys	Ser	Trp	Glu	Gly	Cys	Glu	Trp	Arg	Phe	Ala	Arg	Ser	Asp	
1				5					10					15		

gag	tta	acc	agg	cac	ttc	cga	aag	cac								75
Glu	Leu	Thr	Arg	His	Phe	Arg	Lys	His								
			20					25								

&lt;210&gt; 129

&lt;211&gt; 25

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 129

Tyr	Arg	Cys	Ser	Trp	Glu	Gly	Cys	Glu	Trp	Arg	Phe	Ala	Arg	Ser	Asp
1				5					10					15	
Glu	Leu	Thr	Arg	His	Phe	Arg	Lys	His							
			20					25							

&lt;210&gt; 130

&lt;211&gt; 75

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)...(75)

&lt;400&gt; 130

ttc	agc	tgt	agc	tgg	aaa	ggg	tgt	gaa	agg	agg	ttt	gcc	cgt	tct	gat	48
Phe	Ser	Cys	Ser	Trp	Lys	Gly	Cys	Glu	Arg	Arg	Phe	Ala	Arg	Ser	Asp	
1				5					10					15		

gaa	ctg	tcc	aga	cac	agg	cga	acc	cac								75
Glu	Leu	Ser	Arg	His	Arg	Arg	Thr	His								
			20					25								

&lt;210&gt; 131

&lt;211&gt; 25

<212> PRT  
 <213> Homo sapiens

<400> 131  
 Phe Ser Cys Ser Trp Lys Gly Cys Glu Arg Arg Phe Ala Arg Ser Asp  
 1 5 10 15  
 Glu Leu Ser Arg His Arg Arg Thr His  
 20 25

<210> 132  
 <211> 75  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)...(75)

<400> 132  
 ttc gcc tgc agc tgg cag gac tgc aac aag aag ttc gcg cgc tcc gac 48  
 Phe Ala Cys Ser Trp Gln Asp Cys Asn Lys Lys Phe Ala Arg Ser Asp  
 1 5 10 15  
 gag ctg gcg cgg cac tac cgc aca cac 75  
 Glu Leu Ala Arg His Tyr Arg Thr His  
 20 25

<210> 133  
 <211> 25  
 <212> PRT  
 <213> Homo sapiens

<400> 133  
 Phe Ala Cys Ser Trp Gln Asp Cys Asn Lys Lys Phe Ala Arg Ser Asp  
 1 5 10 15  
 Glu Leu Ala Arg His Tyr Arg Thr His  
 20 25

<210> 134  
 <211> 75  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)...(75)

<400> 134  
 tac cac tgc aac tgg gac ggc tgc ggc tgg aag ttt gcg cgc tca gac 48  
 Tyr His Cys Asn Trp Asp Gly Cys Gly Trp Lys Phe Ala Arg Ser Asp  
 1 5 10 15  
 gag ctc acg cgc cac tac cga aag cac 75  
 Glu Leu Thr Arg His Tyr Arg Lys His  
 20 25

<210> 135  
 <211> 25  
 <212> PRT  
 <213> Homo sapiens

<400> 135  
 Tyr His Cys Asn Trp Asp Gly Cys Gly Trp Lys Phe Ala Arg Ser Asp  
 1 5 10 15  
 Glu Leu Thr Arg His Tyr Arg Lys His  
 20 25

<210> 136  
 <211> 72  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)...(72)

<400> 136  
 ttc ctc tgt cag tat tgt gca cag aga ttt ggg cga aag gat cac ctg 48  
 Phe Leu Cys Gln Tyr Cys Ala Gln Arg Phe Gly Arg Lys Asp His Leu  
 1 5 10 15  
 act cga cat atg aag aag agt cac 72  
 Thr Arg His Met Lys Lys Ser His  
 20

<210> 137  
 <211> 24  
 <212> PRT  
 <213> Homo sapiens

<400> 137  
 Phe Leu Cys Gln Tyr Cys Ala Gln Arg Phe Gly Arg Lys Asp His Leu  
 1 5 10 15  
 Thr Arg His Met Lys Lys Ser His  
 20

<210> 138  
 <211> 78  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> primer for PCR

<400> 138  
 tgtcgaatct gcatgcgtaa cttcagtcgt agtgaccacc ttaccaccca catccggacc 60  
 cacactggcc agaaaccc 78

<210> 139  
 <211> 81  
 <212> DNA  
 <213> Artificial Sequence

&lt;220&gt;

&lt;223&gt; primer for PCR

&lt;400&gt; 139

```

ggtaggcggcc gttacttact tagagctcga cgtcttactt acttagcggc cgcactagta      60
gatctgaatt cattcaccgg t                                                    81

```

&lt;210&gt; 140

&lt;211&gt; 69

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)...(69)

&lt;400&gt; 140

```

ttc cag tgt aaa act tgt cag cga aag ttc tcc cgg tcc gac cac ctg      48
Phe Gln Cys Lys Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu
 1              5              10              15

```

```

aag acc cac acc agg act cat      69
Lys Thr His Thr Arg Thr His
                20

```

&lt;210&gt; 141

&lt;211&gt; 23

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 141

```

Phe Gln Cys Lys Thr Cys Gln Arg Lys Phe Ser Arg Ser Asp His Leu
 1              5              10              15
Lys Thr His Thr Arg Thr His
                20

```

&lt;210&gt; 142

&lt;211&gt; 69

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)...(69)

&lt;400&gt; 142

```

ttt gcc tgc gag gtc tgc ggt gtt cga ttc acc agg aac gac aag ctg      48
Phe Ala Cys Glu Val Cys Gly Val Arg Phe Thr Arg Asn Asp Lys Leu
 1              5              10              15

```

```

aag atc cac atg cgg aag cac      69
Lys Ile His Met Arg Lys His
                20

```

&lt;210&gt; 143

<211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 143  
 Phe Ala Cys Glu Val Cys Gly Val Arg Phe Thr Arg Asn Asp Lys Leu  
 1 5 10 15  
 Lys Ile His Met Arg Lys His  
 20

<210> 144  
 <211> 75  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)...(75)

<400> 144  
 tat gta tgc gat gta gag gga tgt acg tgg aaa ttt gcc cgc tca gat 48  
 Tyr Val Cys Asp Val Glu Gly Cys Thr Trp Lys Phe Ala Arg Ser Asp  
 1 5 10 15  
 aag ctc aac aga cac aag aaa agg cac 75  
 Lys Leu Asn Arg His Lys Lys Arg His  
 20 25

<210> 145  
 <211> 25  
 <212> PRT  
 <213> Homo sapiens

<400> 145  
 Tyr Val Cys Asp Val Glu Gly Cys Thr Trp Lys Phe Ala Arg Ser Asp  
 1 5 10 15  
 Lys Leu Asn Arg His Lys Lys Arg His  
 20 25

<210> 146  
 <211> 69  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)...(69)

<400> 146  
 tat att tgc aga aag tgt gga cgg ggc ttt agt cgg aag tcc aac ctt 48  
 Tyr Ile Cys Arg Lys Cys Gly Arg Gly Phe Ser Arg Lys Ser Asn Leu  
 1 5 10 15  
 atc aga cat cag agg aca cac 69  
 Ile Arg His Gln Arg Thr His  
 20

<210> 147  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 147  
 Tyr Ile Cys Arg Lys Cys Gly Arg Gly Phe Ser Arg Lys Ser Asn Leu  
 1 5 10 15  
 Ile Arg His Gln Arg Thr His  
 20

<210> 148  
 <211> 69  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> (1)...(69)

<400> 148  
 tat cta tgt agt gag tgt gac aaa tgc ttc agt aga agt aca aac ctc 48  
 Tyr Leu Cys Ser Glu Cys Asp Lys Cys Phe Ser Arg Ser Thr Asn Leu  
 1 5 10 15

ata agg cat cga aga act cac 69  
 Ile Arg His Arg Arg Thr His  
 20

<210> 149  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 149  
 Tyr Leu Cys Ser Glu Cys Asp Lys Cys Phe Ser Arg Ser Thr Asn Leu  
 1 5 10 15  
 Ile Arg His Arg Arg Thr His  
 20

<210> 150  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> purified polypeptide

<220>  
 <221> VARIANT  
 <222> 1, 13  
 <223> Xaa = Phe or Tyr

<220>  
 <221> VARIANT



<222> 2, 4-8, 10-12, 14, 16, 20, 23-27  
 <223> Xaa = any amino acid

<220>  
 <221> VARIANT  
 <222> 19  
 <223> Xaa = hydrophobic residue

<400> 150  
 Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Gln Xaa  
 1 5 10 15  
 Ala His Xaa Xaa Arg His Xaa Xaa Xaa Xaa Xaa His  
 20 25

<210> 151  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> purified polypeptide

<220>  
 <221> VARIANT  
 <222> 1, 13  
 <223> Xaa = Phe or Tyr

<220>  
 <221> VARIANT  
 <222> 2, 4-8, 10-12, 14, 16, 20, 23-27  
 <223> Xaa = any amino acid

<220>  
 <221> VARIANT  
 <222> 19  
 <223> Xaa = hydrophobic residue

<400> 151  
 Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Gln Xaa  
 1 5 10 15  
 Phe Asn Xaa Xaa Arg His Xaa Xaa Xaa Xaa Xaa His  
 20 25

<210> 152  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> purified polypeptide

<220>  
 <221> VARIANT  
 <222> 1, 13  
 <223> Xaa = Phe or Tyr

<220>  
 <221> VARIANT  
 <222> 2, 4-8, 10-12, 14, 16, 20, 23-27  
 <223> Xaa = any amino acid

<220>  
 <221> VARIANT  
 <222> 19  
 <223> Xaa = hydrophobic residue

<400> 152  
 Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Gln Xaa  
 1 5 10 15  
 Ser His Xaa Xaa Thr His Xaa Xaa Xaa Xaa Xaa His  
 20 25

<210> 153  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> purified polypeptide

<220>  
 <221> VARIANT  
 <222> 1, 13  
 <223> Xaa = Phe or Tyr

<220>  
 <221> VARIANT  
 <222> 2, 4-8, 10-12, 14, 16, 20, 23-27  
 <223> Xaa = any amino acid

<220>  
 <221> VARIANT  
 <222> 19  
 <223> Xaa = hydrophobic residue

<400> 153  
 Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Gln Xaa  
 1 5 10 15  
 Ser His Xaa Xaa Val His Xaa Xaa Xaa Xaa Xaa His  
 20 25

<210> 154  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> purified polypeptide

<220>  
 <221> VARIANT  
 <222> 1, 13

<223> Xaa = Phe or Tyr

<220>

<221> VARIANT

<222> 2, 4-8, 10-12, 14, 16, 20, 23-27

<223> Xaa = any amino acid

<220>

<221> VARIANT

<222> 19

<223> Xaa = hydrophobic residue

<400> 154

Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Gln	Xaa
1				5				10						15	
Ser	Asn	Xaa	Xaa	Ile	His	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	His			
			20					25							

<210> 155

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> purified polypeptide

<220>

<221> VARIANT

<222> 1, 13

<223> Xaa = Phe or Tyr

<220>

<221> VARIANT

<222> 2, 4-8, 10-12, 14, 16, 20, 23-27

<223> Xaa = any amino acid

<220>

<221> VARIANT

<222> 19

<223> Xaa = hydrophobic residue

<400> 155

Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Gln	Xaa
1				5				10						15	
Ser	Asn	Xaa	Xaa	Arg	His	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	His			
			20					25							

<210> 156

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> purified polypeptide

<220>

<221> VARIANT

<222> 1, 13

<223> Xaa = Phe or Tyr

<220>

<221> VARIANT

<222> 2, 4-8, 10-12, 14, 16, 20, 23-27

<223> Xaa = any amino acid

<220>

<221> VARIANT

<222> 19

<223> Xaa = hydrophobic residue

<400> 156

Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Gln	Xaa
1			5					10						15	
Thr	His	Xaa	Xaa	Gln	His	Xaa	Xaa	Xaa	Xaa	Xaa	His				
			20					25							

<210> 157

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> purified polypeptide

<220>

<221> VARIANT

<222> 2-6, 8-10, 12, 14, 18, 21-25

<223> Xaa = any amino acid

<220>

<221> VARIANT

<222> 11

<223> Xaa = Phe or Tyr

<220>

<221> VARIANT

<222> 17

<223> Xaa = hydrophobic residue

<400> 157

Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Gln	Xaa	Thr	His
1			5					10						15	
Xaa	Xaa	Arg	His	Xaa	Xaa	Xaa	Xaa	Xaa	His						
			20					25							

<210> 158

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> purified polypeptide

<220>

<221> VARIANT

<222> 1, 13

<223> Xaa = Phe or Tyr

<220>

<221> VARIANT

<222> 2, 4-8, 10-12, 14, 16, 20, 23-27

<223> Xaa = any amino acid

<220>

<221> VARIANT

<222> 19

<223> Xaa = hydrophobic residue

<400> 158

Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Arg	Xaa
1			5					10						15	
Asp	Lys	Xaa	Xaa	Ile	His	Xaa	Xaa	Xaa	Xaa	Xaa	His				
			20					25							

<210> 159

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> purified polypeptide

<220>

<221> VARIANT

<222> 1, 13

<223> Xaa = Phe or Tyr

<220>

<221> VARIANT

<222> 2, 4-8, 10-12, 14, 16, 20, 23-27

<223> Xaa = any amino acid

<220>

<221> VARIANT

<222> 19

<223> Xaa = hydrophobic residue

<400> 159

Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Arg	Xaa
1			5					10						15	
Ser	Asn	Xaa	Xaa	Arg	His	Xaa	Xaa	Xaa	Xaa	Xaa	His				
			20					25							

<210> 160

<211> 28

<212> PRT

<213> Artificial Sequence

<220>  
 <223> purified polypeptide

<220>  
 <221> VARIANT  
 <222> 1, 13  
 <223> Xaa = Phe or Tyr

<220>  
 <221> VARIANT  
 <222> 2, 4-8, 10-12, 14, 16, 20, 23-27  
 <223> Xaa = any amino acid

<220>  
 <221> VARIANT  
 <222> 19  
 <223> Xaa = hydrophobic residue

<400> 160  
 Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Arg Xaa  
 1 5 10 15  
 Thr Asn Xaa Xaa Arg His Xaa Xaa Xaa Xaa Xaa His  
 20 25

<210> 161  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> purified polypeptide

<220>  
 <221> VARIANT  
 <222> 1, 13  
 <223> Xaa = Phe or Tyr

<220>  
 <221> VARIANT  
 <222> 2, 4-8, 10-12, 14, 16, 20, 23-27  
 <223> Xaa = any amino acid

<220>  
 <221> VARIANT  
 <222> 19  
 <223> Xaa = hydrophobic residue

<400> 161  
 Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Gln Xaa  
 1 5 10 15  
 Gly Asn Xaa Xaa Arg His Xaa Xaa Xaa Xaa Xaa His  
 20 25

<210> 162  
 <211> 28  
 <212> PRT

<213> Artificial Sequence

<220>

<223> purified polypeptide

<220>

<221> VARIANT

<222> 1, 13

<223> Xaa = Phe or Tyr

<220>

<221> VARIANT

<222> 2, 4-8, 10-12, 14, 16, 20, 23-27

<223> Xaa = any amino acid

<220>

<221> VARIANT

<222> 19

<223> Xaa = hydrophobic residue

<400> 162

Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Arg	Xaa
1				5				10						15	
Asp	Glu	Xaa	Xaa	Arg	His	Xaa	Xaa	Xaa	Xaa	Xaa	His				
			20					25							

<210> 163

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> purified polypeptide

<220>

<221> VARIANT

<222> 1, 13

<223> Xaa = Phe or Tyr

<220>

<221> VARIANT

<222> 2, 4-8, 10-12, 14, 16, 20, 23-27

<223> Xaa = any amino acid

<220>

<221> VARIANT

<222> 19

<223> Xaa = hydrophobic residue

<400> 163

Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Arg	Xaa
1				5				10						15	
Asp	His	Xaa	Xaa	Arg	His	Xaa	Xaa	Xaa	Xaa	His					
			20					25							

<210> 164

<211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> purified polypeptide

<220>  
 <221> VARIANT  
 <222> 1, 13  
 <223> Xaa = Phe or Tyr

<220>  
 <221> VARIANT  
 <222> 2, 4-8, 10-12, 14, 16, 20, 23-27  
 <223> Xaa = any amino acid

<220>  
 <221> VARIANT  
 <222> 19  
 <223> Xaa = hydrophobic residue

<400> 164  
 Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Arg Xaa  
   1                  5                  10                  15  
 Asp His Xaa Xaa Thr His Xaa Xaa Xaa Xaa Xaa His  
           20                  25

<210> 165  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> purified polypeptide

<220>  
 <221> VARIANT  
 <222> 1, 13  
 <223> Xaa = Phe or Tyr

<220>  
 <221> VARIANT  
 <222> 2, 4-8, 10-12, 14, 16, 20, 23-27  
 <223> Xaa = any amino acid

<220>  
 <221> VARIANT  
 <222> 19  
 <223> Xaa = hydrophobic residue

<400> 165  
 Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Arg Xaa  
   1                  5                  10                  15  
 Asp Lys Xaa Xaa Arg His Xaa Xaa Xaa Xaa Xaa His  
           20                  25



<210> 166  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> purified polypeptide

<220>  
 <221> VARIANT  
 <222> 1, 13  
 <223> Xaa = Phe or Tyr

<220>  
 <221> VARIANT  
 <222> 2, 4-8, 10-12, 14, 16, 20, 23-27  
 <223> Xaa = any amino acid

<220>  
 <221> VARIANT  
 <222> 19  
 <223> Xaa = hydrophobic residue

<400> 166  
 Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Arg Xaa  
 1 5 10 15  
 Ser His Xaa Xaa Arg His Xaa Xaa Xaa Xaa Xaa His  
 20 25

<210> 167  
 <211> 78  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> plasmid sequence

<220>  
 <221> CDS  
 <222> (1)...(39)

<400> 167  
 gat ccg cgg gaa ttc aga tct act agt gcg gcc gct aag taagtaagac 49  
 Asp Pro Arg Glu Phe Arg Ser Thr Ser Ala Ala Ala Lys  
 1 5 10

gtcgagctcg ccatcgcggt ggaagcttt 78

<210> 168  
 <211> 13  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> plasmid sequence

&lt;400&gt; 168

Asp Pro Arg Glu Phe Arg Ser Thr Ser Ala Ala Ala Lys  
 1 5 10

&lt;210&gt; 169

&lt;211&gt; 102

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)...(102)

&lt;400&gt; 169

acc ggg cag aaa ccg tac aaa tgt aag caa tgt ggg aaa gct ttt gga 48  
 Thr Gly Gln Lys Pro Tyr Lys Cys Lys Gln Cys Gly Lys Ala Phe Gly  
 1 5 10 15

tgt ccc tca aac ctt cga agg cat gga agg act cac acc ggc gag aaa 96  
 Cys Pro Ser Asn Leu Arg Arg His Gly Arg Thr His Thr Gly Glu Lys  
 20 25 30

ccg cgg 102  
 Pro Arg

&lt;210&gt; 170

&lt;211&gt; 34

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 170

Thr Gly Gln Lys Pro Tyr Lys Cys Lys Gln Cys Gly Lys Ala Phe Gly  
 1 5 10 15  
 Cys Pro Ser Asn Leu Arg Arg His Gly Arg Thr His Thr Gly Glu Lys  
 20 25 30  
 Pro Arg

&lt;210&gt; 171

&lt;211&gt; 102

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)...(102)

&lt;400&gt; 171

acc ggg gag aag cca tac aag tgt aag gag tgt ggg aaa gcc ttc aac 48  
 Thr Gly Glu Lys Pro Tyr Lys Cys Lys Glu Cys Gly Lys Ala Phe Asn  
 1 5 10 15

cac agc tcc aac ttc aat aaa cac cac aga atc cac acc ggc gaa aag 96  
 His Ser Ser Asn Phe Asn Lys His His Arg Ile His Thr Gly Glu Lys  
 20 25 30

ccg cgg  
Pro Arg

102

<210> 172  
<211> 34  
<212> PRT  
<213> Homo sapiens

<400> 172  
Thr Gly Glu Lys Pro Tyr Lys Cys Lys Glu Cys Gly Lys Ala Phe Asn  
1 5 10 15  
His Ser Ser Asn Phe Asn Lys His His Arg Ile His Thr Gly Glu Lys  
20 25 30  
Pro Arg

<210> 173  
<211> 102  
<212> DNA  
<213> Homo sapiens

<220>  
<221> CDS  
<222> (1)...(102)

<400> 173  
acc ggg gag agg cca ttt gaa tgt aag gaa tgt ggg aaa gcc ttt agt 48  
Thr Gly Glu Arg Pro Phe Glu Cys Lys Glu Cys Gly Lys Ala Phe Ser  
1 5 10 15  
agt ggt tca aac ttc act cga cat cag aga att cac acc ggt gaa aag 96  
Ser Gly Ser Asn Phe Thr Arg His Gln Arg Ile His Thr Gly Glu Lys  
20 25 30

ccg cgg  
Pro Arg

102

<210> 174  
<211> 34  
<212> PRT  
<213> Homo sapiens

<400> 174  
Thr Gly Glu Arg Pro Phe Glu Cys Lys Glu Cys Gly Lys Ala Phe Ser  
1 5 10 15  
Ser Gly Ser Asn Phe Thr Arg His Gln Arg Ile His Thr Gly Glu Lys  
20 25 30  
Pro Arg

<210> 175  
<211> 108  
<212> DNA  
<213> Homo sapiens

<220>  
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ttt gcc cgc tca gat gag ctc aac aga cac aag aaa agg cac acc ggc	96
Phe Ala Arg Ser Asp Glu Leu Asn Arg His Lys Lys Arg His Thr Gly	
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caa aat tca act ctc aga gta cac cag aga att cac acc ggc gaa aag	96
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gtg agc tca acc ctt att aga cat cag aga atc cac acc ggc gag aga      96
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